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WPAFB hosts first LEGO league championship

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WRIGHT-PATTERSON AIR FORCE BASE, Ohio – Every day, the 88th Air Base Wing Operations Hangar functions as a safe haven to ready planes for Air Force missions. However, on January 16 and 17, it was anything but as aliens, Segways, 420 students, 150 volunteers and 1200 spectators turned the hangar into a Martian landscape, overrun by miniature robots.

All this excitement came thanks to the FIRST LEGO League (FLL), Robotics teams from all corners of Ohio gathered there for the 2003 FLL Ohio State Competition coordinated by the Wright-Patterson Educational Outreach Office.

The FLL challenge, *Mission Mars*, required teams of students, ranging in age from nine to 14, to solve Martian exploration problems similar to the ones faced by NASA engineers, including landscape exploration and colonization. The students use LEGO MINDSTORMS robotics technology to work their solutions to the challenge. In addition teams were required to plan a robotic mission to Mars.

"This year's competition underscores many of the goals of science and technology thrusts for both the United States and the Air Force," said Maj. Gen. Paul Nielsen, commander of the Air Force Research Laboratory, during the closing ceremonies of this year's competition. "I can't stress enough how important the next generation of scientists and engineers will be, and captivating their minds at this age is the way to get them to work for us in the future."

This is the third year that Wright Patterson Air Force's Educational Outreach coordinated the robotics season for Ohio. Major funding for the Educational Outreach program is provided by the Air Force Research Laboratory.

Teams were judged in different areas ranging from research, technical execution, teamwork and robot performance. All of the areas were combined for the most prestigious award, the Director's Award.

"Recognizing students for achievement in science and technology is a big part of our mission, however, offering students the opportunity to succeed in these areas is at the heart of our program," said Connie Jensen, Robotics Program Coordinator for the Educational Outreach program.

The *Mission Mars* challenge was met by more than 4200 teams from across the United States and around the world. Students worked through their solutions during October and November 2003, and then proceeded to local qualifying events that led to 42 state tournaments held throughout December 2003 and January 2004.

Grants from Wright-Kettering Chapter of the Association of Unmanned Vehicle Systems International and the Dayton Section of the American Society of Mechanical Engineers provided support for the competition.

FIRST (For Inspiration and Recognition of Science and Technology) was founded to inspire interest in science and engineering among young people. This year's *Mission Mars* challenge coincides with NASA's current exploration of the Red Planet.

FIRST and LEGO partnered to create FLL based on the belief that learning and fun go together and that an inspired mind can accomplish any goal. Each year students form teams that research, design, build and program robots to solve real-world problems using LEGO bricks, motors and gears. Past challenges have included environmental search and rescue operations, assessing global climate change and urban planning issues.

Although students use LEGO elements during the competition season, federal endorsement of their products is not intended or implied. @